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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/775,934

02/09/2004

Arnd Kausch

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3171

23872

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03/07/2006

MCGLEW & TUTTLE, PC

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EXAMINER

BUNIN, ANDREW M

ART UNIT

PAPER NUMBER

3743

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/775,934

Applicant(s)

KAUSCH, ARND

Examiner

Andrew M. Bunin

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18, 19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 18, 19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8, 12, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Rankin, Sr. et al. (US 4513452). Rankin, Sr. et al. disclose a device for supplying breathing air in an interior of safety clothing, the device comprises a connection means 70 to a compressed air source 66 for providing breathing air through hose system (Figure 2) (abstract, lines 5-6) (column 3, lines 66-67). Although Rankin, Sr. et al. disclose the cooling air as being split from the breathing air, this cooling air would continue to read as a compressed air source for providing breathing air. The cooling air still broadly reads as being breathable by a user. Therefore, element 106 does in fact receive breathing air from a connection means 70. Rankin, Sr. et al. continue to disclose a hose system that is connected to said connection means 70 from which breathing air enters said interior of said safety clothing, wherein said hose system further comprises a permeable tube section made porous (apertured tube 106) and

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receiving the breathing air from the connection means 70 (columns 3, lines 67-68 to column 4, lines 1-18). The definition of permeable is having "pores or openings that permit liquids or gases to pass through" (dictionary.com). Therefore, section 106 with apertures can be defined as being permeable. Rankin, Sr. et al. continue to disclose a passage (110) from the permeable tubular section 106 capable of providing breathing gas to breathing organs of a user of the safety clothing. Since the gas is flowing into the hood portion of a user, the device still meets the feature of supplying breathable gas to a user with or without mask 122.

As for claim 12, Rankin, Sr. et al. further disclose a device comprising distributor hoses (86 and 96), each of said distributor hoses having a discharge opening from which breathing air of a compressed air source flows out, said distributor hoses being arranged distributed over said inside of said safety clothing (see Figure 1).

As for claim 18, Rankin, Sr. et al. continue to disclose delivering breathing air from a permeable tubular section (apertures 110 of tube 106) to breathing organs such as the nose and mouth of the user of this safety clothing.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. in view of Childers et al. (US 4458680). Rankin, Sr. et al. disclose a device for supplying breathing air in an interior of safety clothing, the device comprises a connection means 70 to a compressed air source 66 for providing breathing air (abstract, lines 5-6) (column 3, lines 66-67). Although Rankin, Sr. et al. disclose the cooling air as being split from the breathing air, this cooling air would continue to read as a compressed air source for providing breathing air. The cooling air still broadly reads as being breathable by a user. Therefore, element 106 does in fact receive breathing air from a connection means 70. Rankin, Sr. et al. continue to disclose a hose system that is connected to said connection means 70 from which breathing air enters said interior of said safety clothing, wherein said hose system further comprises a permeable tube section made porous (apertured tube 106) and receiving the breathing air from the connection means 70 (columns 3, lines 67-68 to column 4, lines 1-18). The definition of permeable is having "pores or openings that permit liquids or gases to pass through" (dictionary.com). Therefore, section 106 with apertures can be defined as being permeable. However, Rankin, Sr. et al. doesn't disclose the permeable tube as having permeability for minimizing either mucosa-drying pressure or noise nuisance. Childers et al. teach similar safety clothing that supplies breathing air through a tube section 44 that includes a baffle 54a overlying hose 44 for minimizing a noise nuisance (column 6, lines 21-50). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify

the device of Rankin, Sr. et al. with the baffle of Childers et al. in order to provide a low noise level air delivery system.

Rankin, Sr. et al. further disclose the permeable tube section 106 is formed in a horizontally extending semicircle through t-fitting 104 and is placed at level of a neck part of a user of said safety clothing (see Figure 2). In addition, the tubes 106 on both sides of fitting 104 are capable of being turned forward further within the fitting in order for the semicircle to become more horizontal from the curve of 106 on one side through 104 to a curve of 106 on the other side. It is noted that applicant's specification does not set forth the arrangement (specifically horizontal), as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art.

Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patentably distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

The horizontally extending semicircle 106 further comprises a lower area and an upper area wherein said lower area is sealed and said upper area is porous (See Figure 2 below).

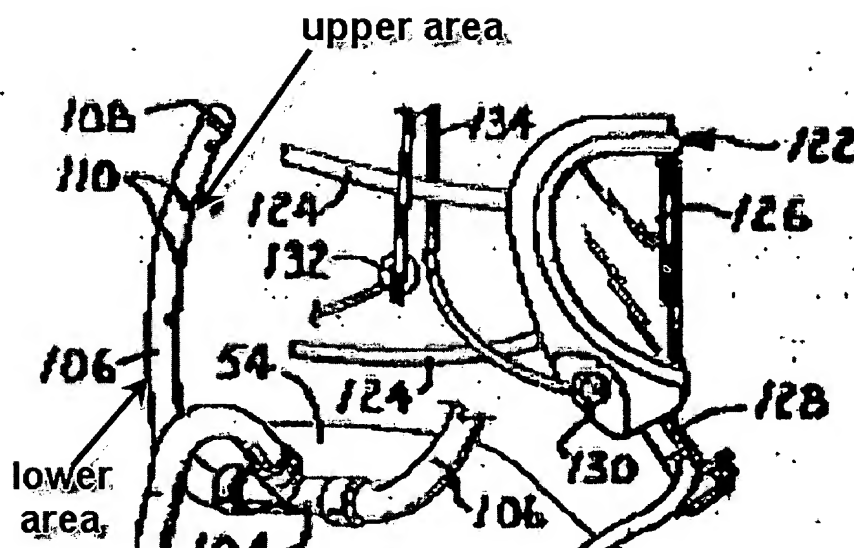


Figure 2  
Prior Art: US 4513452

Rankin, Sr. et al. further disclose a device comprising distributor hoses (86 and 96), each of said distributor hoses having a discharge opening from which breathing air of a compressed air source flows out, said distributor hoses being arranged distributed over said inside of said safety clothing (see Figure 1).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. and Childers et al. in view of Moretti (US 4271833). Rankin, Sr. et al. and Childers et al. disclose everything except the porous part of said permeable tube section as being made of a sintered plastic. However, Moretti teaches a suitable porous material as being sintered vinyl (type of plastic) (column 4, lines 6-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use the sintered plastic taught by Moretti for the porous part of the

permeable tube section disclosed by Rankin, Sr. et al. in order for this tube section to be more flexible. In addition, it is noted that applicant's specification does not set forth this feature, as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patently distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. and Childers et al. in view of Garcia (US 4510930). Rankin, Sr. et al. discloses everything except for the compressed air source being operated with a pressure of 3 to 10 bars. However, Garcia teaches a pressure range of 60 to 80 psig for supplying breathable gas or air through a respirator (column 3, line 15). This range converts to about 4.1-5.5 bars, which is within the range disclosed in the instant application. Therefore it would have been obvious to one having ordinary skill in the art to use the range taught by Garcia for the device of Rankin, Sr. et al. in order to comfortably supply breathable air to user.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. and Childers et al. in view of Beizndtsson et al. (US 6837239). Rankin, Sr. et al. discloses everything except the hood part connected to a body part of said safety clothing, said hood having a rear area wherein a pressure relief valve is arranged in said rear area of said hood. However, Beizndtsson et al. teach a hood part connected to a body part of said safety clothing, said hood having a rear area wherein a pressure



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relief valve 14 is arranged in said rear area of said hood (see Figure 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to position a relief valve in the rear area of a hood as taught by Beizndtsson et al. in order to vent excess air within the suit to the atmosphere "when the pressure differential is sufficient" (column 4, lines 18-24).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. in view of Moretti. Rankin, Sr. et al. disclose everything except the porous part of said permeable tube section as being made of a sintered plastic. However, Moretti teaches a suitable porous material as being sintered vinyl (type of plastic) (column 4, lines 6-11). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to use the sintered plastic taught by Moretti for the porous part of the permeable tube section disclosed by Rankin, Sr. et al. in order for this tube section to be more flexible. In addition, it is noted that applicant's specification does not set forth this feature, as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patently distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

Claims 10, 11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. Rankin, Sr. et al. disclose the permeable tube section 106 is formed in a horizontally extending semicircle through t-fitting 104 and is

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placed at level of a neck part of a user of said safety clothing (see Figure 2). In addition, the tubes 106 on both sides of fitting 104 are capable of being turned forward further within the fitting in order for the semicircle to become more horizontal from the curve of 106 on one side through 104 to a curve of 106 on the other side. It is noted that applicant's specification does not set forth the arrangement (specifically horizontal), as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patently distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

The horizontally extending semicircle 106 further comprises a lower area and an upper area wherein said lower area is sealed and said upper area is porous (See Figure 2 below).

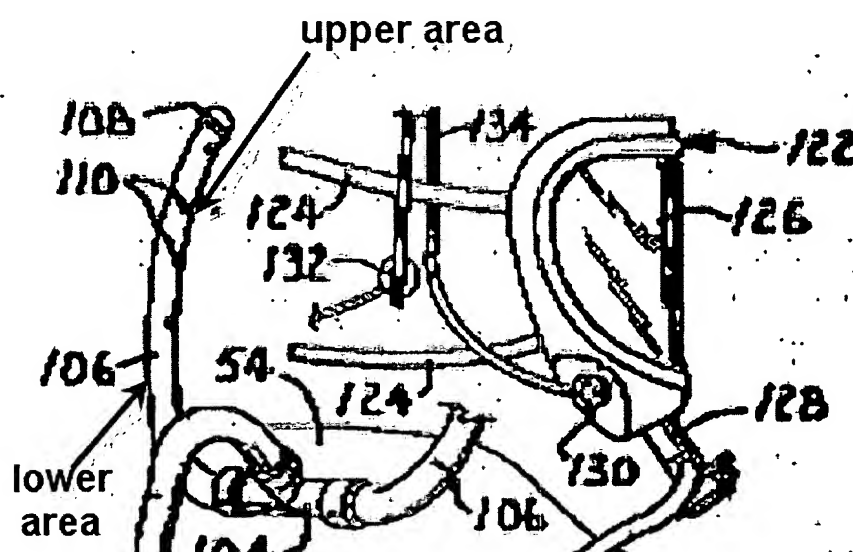


Figure 2  
Prior Art: US 4513452

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. in view of Garcia. Rankin, Sr. et al. disclose everything except for the compressed air source being operated with a pressure of 3 to 10 bars. However, Garcia teaches a pressure range of 60 to 80 psig for supplying breathable gas or air through a respirator (column 3, line 15). This range converts to about 4.1-5.5 bars, which is within the range disclosed in the instant application. Therefore it would have been obvious to one having ordinary skill in the art to use the range taught by Garcia for the device of Rankin, Sr. et al. in order to comfortably supply breathable air to user.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin, Sr. et al. in view of Beizndtsson et al. Rankin, Sr. et al. disclose everything except the hood part connected to a body part of said safety clothing, said hood having a rear area wherein a pressure relief valve is arranged in said rear area of said hood. However, Beizndtsson et al. teach a hood part connected to a body part of said safety clothing, said hood having a rear area wherein a pressure relief valve 14 is arranged in said rear area of said hood (see Figure 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to position a relief valve in the rear area of a hood as taught by Beizndtsson et al. in order to vent excess air within the suit to the atmosphere "when the pressure differential is sufficient" (column 4, lines 18-24).

***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-5, 10, 11, 19, and 21 have been considered but are moot in view of the new ground(s) of rejection.

Rankin, Sr. et al. disclose the permeable tube section 106 is formed in a horizontally extending semicircle through t-fitting 104 and is placed at level of a neck part of a user of said safety clothing (see Figure 2). In addition, the tubes 106 on both sides of fitting 104 are capable of being turned forward further within the fitting in order for the semicircle to become more horizontal from the curve of 106 on one side through 104 to a curve of 106 on the other side. It is noted that applicant's specification does not set forth the arrangement (specifically horizontal), as unexpectedly providing any new result or unexpectedly solving any new problem in the art over the prior art. Accordingly, the examiner considers the selection of such to be a mere obvious matter of design choice and as such does not patentably distinguish the claims over the prior art, barring a convincing showing of evidence to the contrary.

In response to applicant's argument that there is no suggestion for delivering air from element 106 to breathing organs, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Therefore, since the gas is flowing into the hood portion of a user, the device still meets the feature of supplying breathable gas to a user with or without a mask.

Applicant has stated that the device of 452' doesn't deliver breathing air or have a permeable tubular section. However, patent 452' discloses the device as delivering refrigerated air and air for breathing supplied from external sources throughout the specification (abstract, lines 5-6) (column 3, lines 66-67). Although patent 452' discloses how cooling air is split from the breathing air, this cooling air would continue to read as a compressed air source for providing breathing air. The cooling air still broadly reads as being breathable by a user. Therefore, element 106 does in fact receive breathing air from a connection means 70.

Lastly, the limitation of having a permeability that minimizes mucosa-drying pressure or noise nuisance can be broadly interpreted in many variations since there isn't a more definite claimed permeability for accomplishing either task.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 3468299 and US 2773262

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Bunin whose telephone number is (571)272-4801. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (571)272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AMB

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